



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2017-1123; Product Identifier 2017-SW-013-AD]

RIN 2120-AA64

Airworthiness Directives; Airbus Helicopters Deutschland GmbH Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Supplemental notice of proposed rulemaking (SNPRM); reopening of comment period.

SUMMARY: The FAA is revising an earlier proposal for Airbus Helicopters Deutschland GmbH (Airbus Helicopters) Model MBB-BK 117 C-2 and Model MBB-BK 117 D-2 helicopters. This action revises the notice of proposed rulemaking (NPRM) by changing one of the required actions. The FAA is proposing this airworthiness directive (AD) to address the unsafe condition on these products. Since these actions impose an additional burden over that proposed in the NPRM, the FAA is reopening the comment period to allow the public the chance to comment on these proposed changes.

DATES: The comment period for the NPRM published in the Federal Register on December 5, 2017 (82 FR 57390), is reopened. The FAA must receive comments on this SNPRM by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <https://www.regulations.gov>. Follow the online instructions for sending your comments electronically.

- Fax: 202-493-2251.

- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.

- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2017-1123; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the European Aviation Safety Agency (EASA) AD, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed rule, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone 972-641-0000 or 800-232-0323; fax 972-641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>. You may view the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

FOR FURTHER INFORMATION CONTACT: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone 817-222-5110; email matthew.fuller@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to participate in this rulemaking by submitting written comments, data, or views. The FAA also invites comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

The FAA will file in the docket all comments received, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, the FAA will consider all comments received on or before the closing date for comments. The FAA will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. The FAA may change this proposal in light of the comments received.

Discussion

The FAA issued an NPRM to amend 14 CFR part 39 to remove AD 2017-02-07, Amendment 39-18786 (82 FR 10267, February 10, 2017) (“AD 2017-02-07”) and add a new AD. AD 2017-02-07 applies to Airbus Helicopters Model MBB-BK 117 C-2 helicopters, serial numbers up to and including 9750, and Model MBB-BK 117 D-2 helicopters, serial numbers up to and including 20110, with a hydraulic module plate assembly part number B291M0003103 with a single locking attachment point installed. AD 2017-02-07 requires a repetitive inspection and a one-time torque of the hydraulic module plate assembly attachment points (attachment points). The actions in AD 2017-02-07 are intended to prevent failure of an attachment point, loss of the hydraulic module plate, and subsequent loss of control of the helicopter.

The NPRM published in the Federal Register on December 5, 2017 (82 FR 57390). The NPRM proposed to retain the initial inspection and torque requirements of AD 2017-02-07 and require replacing the single locking attachment mechanisms with double locking attachment mechanisms. The NPRM was prompted by EASA AD No. 2017-0047, dated March 13, 2017, issued by EASA, which is the Technical Agent for the Member States of the European Union, to correct an unsafe condition on Airbus Helicopters Deutschland GmbH (formerly Eurocopter Deutschland GmbH) Model MBB-BK117 C-2, MBB-BK117 C-2e, MBB-BK117 D-2 and MBB-BK117 D-2m helicopters. EASA advises that the hydraulic plate assembly on certain MBB-BK117 models has four attachment points on the fuselage secured by a single locking mechanism. According to EASA, a design reassessment revealed stiffness of the hydraulic plate may be insufficient to withstand the in-service loads in the event one of the four single locking attachment

points fails. The EASA AD requires a repetitive inspection and one-time torque tightening of the attachment points until replacement of the single locking attachment hardware with double locking attachment hardware.

Actions Since the NPRM was Issued

Since the NPRM was issued, Airbus Helicopters revised its service information by adding a requirement to reposition the aft grounding straps and inspect the clamping effect of the aft attachment points when the double locking attachment hardware is installed. The revised service information also has an alternative clamp effect inspection for helicopters that have previously installed the double locking attachment hardware. These additional actions address the unsafe condition by ensuring the correct torque is applied and the bolts do not loosen. The FAA is proposing this SNPRM to include these additional actions.

Further, the FAA has corrected an error in the NPRM proposing to apply a torque of 9 to 10 Nm to the left-hand and right-hand nuts of each attachment point. This torque adjustment is only necessary for each forward (not aft) attachment point.

Lastly, the website address for Airbus Helicopters has also changed. This website address has been updated throughout this SNPRM.

Comments

The FAA gave the public the opportunity to comment on the original NPRM (82 FR 57390, December 5, 2017). The FAA received no comments on that NPRM or on the determination of the cost to the public.

FAA's Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA of the unsafe condition described in its AD. The FAA is proposing this SNPRM after evaluating all information provided by EASA and determining the unsafe condition exists and is likely to exist or develop on other helicopters of these same type designs. Certain changes described above expand the scope of the original NPRM. As a result, the FAA has determined that it is necessary to reopen the comment period to provide additional opportunity for the public to comment on this SNPRM.

Related Service Information Under 1 CFR part 51

The FAA reviewed Airbus Helicopters Alert Service Bulletin (ASB) No. ASB MBB-BK117 C-2-29A-003 for Model MBB-BK 117 C-2 helicopters and ASB No. ASB MBB-BK117 D-2-29A-001 for Model MBB-BK 117 D-2 helicopters, both Revision 3 and dated December 19, 2017. Until the attachment points are modified with double locking attachment mechanisms, this service information specifies a repetitive visual inspection for condition and correct installation of the attachment points and replacing the affected parts if there is a crack. This service information also specifies a tightening torque check of the forward attachment points after the initial inspection and replacing the affected parts if torque cannot be applied. This service information specifies procedures to replace the single locking attachment hardware with double locking attachment hardware.

For certain helicopters with a hydraulic module plate assembly with the double

locking attachment hardware installed, this revision of the service information contains procedures to inspect the clamping effect of the aft attachment points and torque tightening the screw joints (bolts). If a bolt can be turned while applying this torque, the service information specifies instructions to replace the split pin, washer, and self-locking castellated nut, check the bolt for wear and replace it if necessary, change the position of the aft grounding strap, check the electrical bonding, and apply PU-Lacquer to the grounding connection.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Other Related Service Information

The FAA also reviewed Airbus Helicopters ASB No. ASB MBB-BK117 C-2-29A-003 for Model MBB-BK 117 C-2 helicopters and ASB No. ASB MBB-BK117 D-2-29A-001 for Model MBB-BK 117 D-2 helicopters, both Revision 1 and dated October 14, 2016, and both Revision 2 and dated February 1, 2017. Revisions 1 and 2 of this service information contain the same visual inspection and torque tightening check procedures as Revision 3. Revision 2 of this service information adds the procedures to replace the single locking attachment hardware with double locking attachment hardware and contains the same forward locking attachment hardware replacement procedures as Revision 3.

Proposed Requirements of the SNPRM

For helicopters with a hydraulic module plate assembly with the single locking attachment hardware installed, this proposed AD would require, within 100 hours time-

in-service (TIS), performing a visual inspection of each attachment point of the hydraulic module plate assembly for a crack and proper installation, and applying torque to the nuts of each forward attachment point. Within 300 hours TIS, this proposed AD would require replacing each single locking attachment point mechanism with a double locking attachment point mechanism.

For helicopters with a hydraulic module plate assembly with double locking attachment hardware installed in accordance with Airbus Helicopters ASB No. ASB MBB-BK117 C-2-29A-003 or ASB No. ASB MBB-BK117 D-2-29A-001, both Revision 2 and dated February 1, 2017, this proposed AD would require, within 300 hours TIS, inspecting the clamping effect of the aft joints and torque tightening the bolts. If a bolt can be turned while applying torque, this proposed AD would require removing the split pin and self-locking castellated nut from service, inspecting the bolt for wear and replacing it if necessary, repositioning the aft grounding strap to the opposite side of the attachment point, replacing the washer, installing a new self-locking castellated nut, inspecting the electrical bonding, installing a new split pin, and applying lacquer to the grounding connection.

Differences Between this SNPRM and the EASA AD

The EASA AD specifies performing the visual inspection of each attachment point at intervals not exceeding 400 flight hours. This proposed AD would not require a repetitive inspection. This proposed AD would require the replacement of each single locking attachment point mechanism with a double locking attachment point mechanism within 300 hours TIS instead, which would make subsequent inspections unnecessary. Since EASA has not revised or superseded its AD to incorporate Revision 3 of the

service information, the EASA AD does not require inspecting the clamping effect of the aft joints, torque tightening the bolts, and corrective action if necessary for helicopters with a hydraulic module plate assembly with double locking attachment hardware installed in accordance with Airbus Helicopters ASB No. ASB MBB-BK117 C-2-29A-003 or ASB No. ASB MBB-BK117 D-2-29A-001, both Revision 2 and dated February 1, 2017.

Costs of Compliance

The FAA estimates that this proposed AD affects 167 helicopters of U.S. Registry. The FAA estimates that operators may incur the following costs in order to comply with this AD. The FAA estimates the cost of labor at \$85 per work-hour.

Visually inspecting the four attachment points would take about 0.75 work-hour for an estimated cost of \$64 per helicopter and \$10,688 for the U.S. fleet. Inspecting the torque of the four attachment points would take about 0.25 work-hour for an estimated cost of \$21 per helicopter and \$3,507 for the U.S. fleet. Replacing any of the attachment point parts would take a minimal amount of time and parts would cost about \$48 per attachment point. Installing four double locking attachment point mechanisms would take a minimal amount of time and parts would cost about \$400 per helicopter and \$66,800 for the U.S. fleet.

For certain double locking attachment hardware aft joints, inspecting the clamping effect and applying torque would take about 1 work-hour for an estimated cost of \$85 per helicopter. If required, inspecting and replacing parts, repositioning the aft grounding strap, inspecting the electrical bonding, and applying lacquer to the grounding

connection would take about 0.5 work-hour and parts would cost about \$15 for an estimated cost of \$58 per helicopter.

According to Airbus Helicopters' service information, some of the costs of this proposed AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage by Airbus Helicopters. Accordingly, the FAA has included all costs in this cost estimate.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national

Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866,
2. Will not affect intrastate aviation in Alaska, and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by Reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2017-02-07, Amendment 39-18786 (82 FR 10267, February 10, 2017), and adding the following new AD:

Airbus Helicopters Deutschland GmbH: Docket No. FAA-2017-1123; Product Identifier 2017-SW-013-AD.

(a) Applicability

This AD applies to Airbus Helicopters Deutschland GmbH Model MBB-BK 117 C-2 helicopters, serial numbers up to and including 9750, and Airbus Helicopters Deutschland GmbH Model MBB-BK 117 D-2 helicopters, serial numbers up to and including 20110, certificated in any category, with a hydraulic module plate assembly part number B291M0003103 with a single locking attachment point installed or with a double locking attachment point installed before the effective date of this AD in accordance with Airbus Helicopters Alert Service Bulletin (ASB) No. ASB MBB-BK117 C-2-29A-003 (ASB MBB-BK117 C-2-29A-003 Rev 2) or ASB No. ASB MBB-BK117 D-2-29A-001 (ASB MBB-BK117 D-2-29A-001 Rev 2), both Revision 2 and dated February 1, 2017, as applicable to your model helicopter.

(b) Unsafe Condition

This AD defines the unsafe condition as failure of a hydraulic module plate assembly attachment point (attachment point). This condition could result in loss of the hydraulic module plate and subsequent loss of control of the helicopter.

(c) Affected ADs

This AD replaces 2017-02-07, Amendment 39-18786 (82 FR 10267, February 10, 2017).

(d) Comments Due Date

The FAA must receive comments by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(e) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(f) Required Actions

Comply with either paragraphs (f)(1) and (2) of this AD, or paragraph (f)(3) of this AD, as applicable to your helicopter.

(1) For helicopters with a hydraulic module plate assembly with a single locking attachment hardware installed, within 100 hours time-in-service (TIS):

(i) Visually inspect the split pins, castellated nuts, plugs, nuts, and hexagon bolts of each attachment point for a crack and for proper installation by following the Accomplishment Instructions, paragraphs 3.B.1.3.a. through 3.B.1.3.d., of Airbus Helicopters ASB No. ASB MBB-BK117 C-2-29A-003 (ASB MBB-BK117 C-2-29A-003 Rev 3) or Airbus Helicopters ASB No. ASB MBB-BK117 D-2-29A-001 (ASB MBB-BK117 D-2-29A-001 Rev 3), both Revision 3 and dated December 19, 2017, as applicable to your model helicopter. Replace any part that has a crack before further flight. If the split pins, castellated nuts, or hexagon bolts are not as depicted in Figures 1 and 2 of ASB MBB-BK117 C-2-29A-003 Rev 3 or ASB MBB-BK117 D-2-29A-001 Rev 3, before further flight, properly install them.

(ii) Apply a torque of 9 to 10 Nm to the left-hand (LH) and right-hand (RH) nuts of each forward attachment point. If a torque of 9 to 10 Nm cannot be applied, replace the affected nut before further flight.

(2) For helicopters with a hydraulic module plate assembly with a single locking attachment hardware installed, within 300 hours TIS:

(i) Replace each forward single locking attachment hardware with double locking attachment hardware by following the Accomplishment Instructions, paragraphs 3.B.3.3. through 3.B.3.6. on page 11 of ASB MBB-BK117 C-2-29A-003 Rev 3 or ASB MBB-BK117 D-2-29A-001 Rev 3, as applicable to your model helicopter, except you are not required to discard old parts.

(ii) Replace each aft single locking attachment hardware with double locking attachment hardware and reposition the LH and RH aft grounding straps by following the Accomplishment Instructions, paragraphs 3.B.3.1. through 3.B.3.7. on page 13 of ASB MBB-BK117 C-2-29A-003 Rev 3 or ASB MBB-BK117 D-2-29A-001 Rev 3, as applicable to your model helicopter, except you are not required to discard old parts.

(3) If you have replaced the attachment hardware with double locking attachment hardware before the effective date of this AD in accordance with ASB MBB-BK117 C-2-29A-003 Rev 2 or ASB MBB-BK117 D-2-29A-001 Rev 2, as applicable to your model helicopter: within 300 hours TIS, inspect the clamping effect of the LH and RH aft screw joints (bolts) of the hydraulic module plate by following the Accomplishment Instructions, paragraph 3.B.5., of ASB MBB-BK117 C-2-29A-003 Rev 3 or ASB MBB-BK117 D-2-29A-001 Rev 3, as applicable to your model helicopter, except you are not required to discard old parts.

Note 1 to paragraph (f)(3) of this AD: Airbus Helicopters refers to bolts as “screw joints.”

(g) Credit for Previous Actions

Actions accomplished before the effective date of this AD in accordance with the procedures specified in the following are considered acceptable for compliance with the corresponding actions in paragraph (f)(1) of this AD:

(1) AD 2017-02-07, Amendment 39-18786 (82 FR 10267, February 10, 2017).

(2) Airbus Helicopters ASB No. ASB MBB-BK117 C-2-29A-003, Revision 1, dated October 14, 2016.

(3) Airbus Helicopters ASB No. ASB MBB-BK117 C-2-29A-003, Revision 2, dated February 1, 2017.

(4) Airbus Helicopters ASB No. ASB MBB-BK117 D-2-29A-001, Revision 1, dated October 14, 2016.

(5) Airbus Helicopters ASB No. ASB MBB-BK117 D-2-29A-001, Revision 2, dated February 1, 2017.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone 817-222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, the FAA suggests that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards

district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(i) Additional Information

(1) Airbus Helicopters ASB No. ASB MBB-BK117 C-2-29A-003 and ASB No. ASB MBB-BK117 D-2-29A-001, both Revision 1 and dated October 14, 2016, and both Revision 2 and dated February 1, 2017, which are not incorporated by reference, contain additional information about the subject of this AD. For service information identified in this AD, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone 972-641-0000 or 800-232-0323; fax 972-641-3775; or at <https://www.airbus.com/helicopters/services/technical-support.html>. You may view a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

(2) The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2017-0047, dated March 13, 2017. You may view the EASA AD on the Internet at <https://www.regulations.gov> in Docket No. FAA-2017-1123.

(j) Subject

Joint Aircraft Service Component (JASC) Code: 2900, Hydraulic Power System.

Issued in Fort Worth, Texas, on February 14, 2020.

Lance T. Gant,

Director, Compliance & Airworthiness Division,
Aircraft Certification Service.

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